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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/941,251  
Filing Date: August 28, 2001  
Appellant(s): BANERJEE ET AL.

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Wayne P. Bailey  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 01/30/2009 appealing from the Office action mailed 10/07/2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

### **(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

### **(8) Evidence Relied Upon**

5827070	Kershaw et al.	10-1998
5885087	Thomas	3-1999
5915973	Hoehn-Saric et al.	6-1999
6755661	Sugimoto	6-2004

Admitted Prior Art

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

(A) Claims 1-3, 12, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661).

In regards to claims 1 and 3, Thomas discloses a test timing system that discloses a computerized testing device that conducts testing for a user whereby a question is presented to the user and the time taken by the user to answer the question is tracked, displayed, and compared to a predetermined time (2:5-20 and 4:45-65). Thomas further discloses that the system may be used to practice examination skills and improve test taking skills (3:4-14) and that the system maintains player profiles in order to provide a history of the user's progress including performance by subject or

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topic (7:43-58). Thomas lacks explicitly disclosing that the alert schedule is based on the profile of the user's previous performance, the relative question difficulty, and alert thresholds and that presentation of test questions are based on levels of difficulty of the test questions and the ability of the test taker.

In related prior art, Sugimoto discloses a testing system that adapts the timing of a test question when a user takes less than an allotted time on a question and provides the extra time on a later question for the user (abstract and 18:48-54). Sugimoto further discloses that profiles of the test taker are maintained, including skill level of the user (9:5-7 and fig 9, user ID and skill code), and the profile is used to determine questions presented to the test taker (9:17-20), a question database that includes information on the question difficulty to be related to the user's skill setting (6:5-7) where the question presentation is adjusted by the user's skill (11:25-30) and a preset time limit for each question (6:63-7:40), which examiner contends is analogous to an alert threshold, that is changed by the system as the user's skill is determined. One skilled in the art would recognize the advantages of providing more time on questions a user has trouble with and less time on questions the user finds easy in order to complete an exam in the allotted time with the most correct answers possible thus improving the test taker's performance and tailoring a test to a user's ability in order to help them improve incrementally.

Therefore it would have been obvious to one skilled in the art at the time to have modified Thomas in view of Sugimoto to include the adaptive timing system in order to further aid the test taker in completing the test in the allotted time while giving as much

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time as necessary to correctly answer questions and customize the tests presented to the user's ability.

The combination of Thomas and Sugimoto does not explicitly disclose that a user alert is generated after the question timing data exceeds an alert threshold and shows the time remaining. Rather, Thomas discloses a constant display of a predetermined time and the elapsed time taken for the question that is periodically updated (4:45-65). However, at the time of the invention it would have been an obvious matter of design choice, well within the abilities of one skilled in the art to have used an alert after the time or the constant display of Thomas as each produces the expected result of apprising the test taker of the time constraints for the test question, where one would recognize that the elapsed time and the predetermined time may be used to determine the time remaining. Accordingly, such a modification fails to distinguish over the prior art. Furthermore, it would have been obvious to one of ordinary skill in the art to include an indication of the total time remaining for the test when the system is used for an actual test as the system of Thomas is intended to prepare a user to take a test within a set amount of time.

In regards to claim 2, Thomas discloses the system is a computer program on a computer (3:53-65).

In regards to claim 12, Thomas discloses that the score for the test questions is stored in permanent storage (6:38-41 and Table 1).

In regards to claims 21 and 22, Thomas discloses the storage of responses to test questions by the test taker and the question timing data for each question (6:37-60),

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but does not explicitly the use of the stored data to update the customized alert profile for use in future tests.

In related prior art, Sugimoto discloses a testing system that adapts the timing of a test question when a user takes less than an allotted time on a question and provides the extra time on a later question for the user (abstract and 18:48-54). Sugimoto further discloses that profiles of the test taker are maintained, including skill level of the user (9:5-7 and fig 9, user ID and skill code), and the profile is used to determine questions presented to the test taker (9:17-20), a question database that includes information on the question difficulty to be related to the user's skill setting (6:5-7) where the question presentation is adjusted by the user's skill (11:25-30) and a preset time limit for each question (6:63-7:40), which examiner contends is analogous to an alert threshold, that is changed by the system as the user's skill is determined. One skilled in the art would recognize the advantages of providing more time on questions a user has trouble with and less time on questions the user finds easy in order to complete an exam in the allotted time with the most correct answers possible thus improving the test taker's performance and tailoring a test to a user's ability in order to help them improve incrementally.

Therefore it would have been obvious to one skilled in the art at the time of the invention to have modified Thomas in view of Sugimoto to have used to the test question and timing history in order to aid the test taker on future tests in order to help the test taker improve their performance.

(B) Claims 4-5, 7, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661) as applied to the claims above and further in view of admitted prior art.

In regards to claims 4, 5, and 7, the billing for services rendered is regarded as old and well known in the art in view of the admitted prior art.

In regards to claims 13, that test creators may be different entities than test administrators is regarded as old and well known in the art in view of the admitted prior art.

(C) Claim 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661) as applied to the claims above, and further in view of Kershaw; Roger C. et al. (US 5827070 A).

In regards to claim 15, Thomas discloses the system as set forth above, but does not explicitly disclose a session identification established for the presentation of the test questions by a proctor device, including a device identifier and wherein outputting test question timing data to the proctor device is based on the proctor device identifier.

In related prior art, Kershaw discloses a test creation and administration system that discloses the collection of statistical data on all examinees taking a certain test (2:8-16) as well as the recording of a test program id, registration id, test center id, and workstation id for each test taker in order to provide an audit trail (73:27-74:26). One skilled in the art would recognize the advantage of maintaining detailed records on test takers to provide accurate records to ensure that no cheating or errors occurred.



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Therefore it would have been obvious to one skilled in the art at the time of the invention to have modified Thomas in view of Sugimoto further in view of Kershaw to have included session identification and proctor identification to maintain accurate and detailed records of the test administration. The combination made does not explicitly disclose that the test question timing data is output to the proctor device based on the proctor device identifier. However, it would have been obvious to base the sending of timing data on proctor id as testing centers commonly provide multiple tests simultaneously and the individual proctors would only need the timing data for the tests they are monitoring thus reducing the data traffic overhead.

(D) Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kershaw in view of Thomas (US 5885087), Hoehn-Saric (US 5915973) and Sugimoto (US 6755661).

Kershaw discloses a test administration system that records statistical data about test takers and identification system about each test taker (2:8-16 and 4:3-5:2). Data recorded includes session identification, test identification with several tests listed suggesting the capability for multiple tests to be presented by the system (73:35-74:27). While Kershaw does track test results for the creation of performance statistics, it lacks in explicitly stating the tracking of question timing data or instant messaging.

In analogous testing system, Thomas discloses the tracking of question timing data and the comparison to predetermined time data (2:5-20 and 4:45-65). One skilled in the art would recognize the advantage of including time data in the statistics gathered by

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Kershaw in order to more accurately determine overall difficulty of a question as well as the notification feature in order to provide to the test takers time indication as standardized tests are time limited and keeping track of user's time is very important (4:49-51).

In an analogous test administration system, Hoehn-Saric discloses that the administrator of a test has great flexibility in sending and receiving messages associated with the administration of a test including data based communications (3:64-4:3, 5:19-40, 7:7-13, 7:23-27, 9:18-24, and 10:42-48). This flexibility may include sending and responding to messages with the test product users as quickly as the physical interconnection is capable of processing and sending them, making them "instant messages".

All of the component parts are known in Kershaw, Thomas and Hoehn-Saric. The only difference is the combination of the "old elements" into a single system by including the component parts in a single administrative system.

Thus it would have been obvious to one having ordinary skill in the art to include the instant messaging taught by Hoehn-Saric and the test question timing of Thomas with the test administration system of Kershaw, since the operation of the instant messaging and the question timing is not dependant on the operation of the test administration system and the other components could be used in combination with a test administration system to achieve the predictable results of a test administration system with test timing and instant messaging.

The combination made lacks explicitly disclosing that the alert schedule is based on the profile of the user's previous performance, the relative question difficulty, and alert thresholds and that presentation of test questions is based on levels of difficulty of the test questions and the ability of the test taker.

In related prior art, Sugimoto discloses a testing system that adapts the timing of a test question when a user takes less than an allotted time on a question and provides the extra time on a later question for the user (abstract and 18:48-54). Sugimoto further discloses that profiles of the test taker are maintained, including skill level of the user (9:5-7 and fig 9, user ID and skill code), and the profile is used to determine questions presented to the test taker (9:17-20), a question database that includes information on the question difficulty to be related to the user's skill setting (6:5-7) and a preset time limit for each question (6:63-7:40), which examiner contends is analogous to an alert threshold, that is changed by the system as the user's skill is determined. One skilled in the art would recognize the advantages of providing more time on questions a user has trouble with and less time on questions the user finds easy in order to complete an exam in the allotted time with the most correct answers possible thus improving the test taker's performance and tailoring a test to a user's ability in order to help them improve incrementally.

Therefore it would have been obvious to one skilled in the art at the time to have modified Thomas in view of Sugimoto to include the adaptive timing system in order to further aid the test taker in completing the test in the allotted time while giving as much

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time as necessary to correctly answer questions and customize the tests presented to the user's ability.

The combination made does not explicitly disclose that a user alert is generated after the question timing data exceeds an alert threshold and shows the time remaining. Rather, Thomas discloses a constant display of a predetermined time and the elapsed time taken for the question that is periodically updated (4:45-65). However, at the time of the invention it would have been an obvious matter of design choice, well within the abilities of one skilled in the art to have used an alert after the time or the constant display of Thomas as each produces the expected result of apprising the test taker of the time constraints for the test question, where one would recognize that the elapsed time and the predetermined time may be used to determine the time remaining. Accordingly, such a modification fails to distinguish over the prior art. Furthermore, it would have been obvious to one of ordinary skill in the art to include an indication of the total time remaining for the test when the system is used for an actual test as the system of Thomas is intended to prepare a user to take a test within a set amount of time.

#### **(10) Response to Argument**

Affiant argues for claim 1 that none of the cited references teach or suggest a customized user alert that includes an amount of time remaining to answer the test question, a suggested amount of time, and an amount of time to complete all test questions. Examiner respectfully disagrees. Thomas is explicit in its intent of providing

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a test pacing aid to test takers. Thomas expressly discloses providing an alert of the time for a particular question and a suggested time for comparison (2:5-20).

Furthermore, it is suggested by the teachings of Thomas which are directed to preparing a test taker to finish a test within the allotted amount of time, that an overall test time left would be useful in furthering the stated goal of test timing preparation.

Affiant further argues that the prior art does not disclose providing the alert to the user after at least one time period. Examiner respectfully disagrees. The system of Thomas provides an alert for the entire time a person is on a question. Such a system would include providing an alert after at least one time period as the alert is constantly displayed and updated to show the current time information.

Affiant additionally argues that the combination of Thomas and Sugimoto does not fairly teach or suggest customized user alert profiles. Examiner respectfully disagrees. Thomas expressly discloses the tracking of test taker's performance by subject or topic (7:43-58). Sugimoto expressly teaches adaptive testing that adjusts the timing of test questions to users based on a profile of the user that is determine based upon previous test taking results (9:5-7, 9:17-20, 11:25-30 and 6:63-7:40). Therefore, one of ordinary skill in the art would have recognized the advantages of such a teaching and would have been motivated to incorporate such teachings into the system of Thomas to provide a test pacing system that took into account the abilities of the user in order to provide the best chance possible to the test taker to finish the test in the allotted amount of time with the most correct answers possible.

Affiant argues for claim 3 that none of the references teach or suggest the presentation of test questions based on the level of difficulty of the test question and the capability of the test taker. Examiner respectfully disagrees. Sugimoto expressly states that as the user takes the test the ability level is determined and used to present the questions. "That is, if the ability value becomes higher, the difficulty is made higher. If the ability value becomes lower, the difficulty is made lower," (11:25-30). One of ordinary skill in the art would have recognized the advantages of such a presentation to tailor a test to the user's ability so that they may be tested to their abilities.

Affiant argues for claim 15 that the prior art does not teach or suggest a session identification established for the presentation of test questions. Examiner respectfully disagrees. Kershaw discloses a test administration system also called a proctoring system. Kershaw expressly discloses recording the testing center, workstation number, and session number for each examinee testing session (73:27-74:26) which would be the proctoring devices and corresponding session identification. Further as stated above, as the testing devices would be administering testing for numerous tests at once, it would have been obvious to use the identification information to only send test timing information to the particular examinee for which it is intended.

Affiant argues for claim 51 that the prior art does not teach or suggest a proctor device facilitating instant messaging. Examiner respectfully disagrees. Hoehn-Saric teaches that test administrators such as those operating the proctoring system of Kershaw would advantageously have the ability to rapidly respond to test taker queries by sending data communications where the only limit would be on the speed of the

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medium to transmit such a message making it effectively instant (3:64-4:3, 5:19-40, 7:7-13, 7:23-27, 9:18-24, and 10:42-48). One skilled in the art would have recognized the advantages of rapid communication when addressing the needs of a test taker under a time limit and would have been so motivated to use the teachings with the proctoring system of Kershaw.

Affiant's other arguments are addressed above.

In response to affiant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/DAVID DUFFY/

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